

**Notice of Allowability**

Application No.

08/533,895

Applicant(s)

TOPALIAN ET AL.

Examiner

Art Unit

F. Pierre VanderVegt

1644

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to papers filed 3/19/04.
2. ☒ The allowed claim(s) is/are 100,107-137 and 192-220.
3. ☒ The drawings filed on 13 June 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date 06092004.
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

Art Unit: 1644

### DETAILED ACTION

Claims 1-99, 101 and 104-106 have previously been canceled.

Claims 138-191, presented after-final, were not entered.

New claims 192-218 have been added.

Accordingly, claims 100, 102-103, 107-137 and 192-218 are currently pending and are the subject of examination in the present Office Action.

#### *Continued Examination Under 37 CFR 1.114*

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 19, 2004 has been entered.

#### *Examiner's Amendment*

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Julie Hong on June 9, 2004.

The application has been amended as follows:

#### IN THE CLAIMS:

In claim 100, line 6, both recitations of "about" have been deleted.

In claim 114, line 1, the recitation of "The" has been replaced by --A single-chain Class II-MHC-peptide construct comprising the--.

In claim 114, line 2, the recitation of "a" has been replaced by --an immunogenic peptide binding--.

In claim 115, line 1, the recitation of "immunogenic peptide" has been replaced by

Art Unit: 1644

-- single-chain Class II-MHC-peptide construct--.

In claim 115, line 2, the phrase --immunogenic peptide binding-- has been inserted before the recitation of "portion".

In claim 116, line 2, the recitation of "an" has been replaced by --the--.

In claim 117, line 1, the phrase --MHC Class II molecule or an immunogenic peptide binding portion thereof linked to the-- has been inserted before "immunogenic".

In claim 117, line 2, the recitation of "114" has been replaced by --100--.

In claim 192, line 1, the recitation of "An" has been replaced by --A derivative of an--.

In claim 192, line 3, the recitation of "portion comprises" has been replaced by --derivative consists of--.

In claim 192, line 5, the recitation of "portion comprises" has been replaced by --derivative consists of--.

In claim 192, line 7, both recitations of "about" have been deleted.

In claim 192, line 7, the phrase --derivative of an isolated immunogenic-- has been inserted before "peptide".

In claim 193, line 1, the phrase --derivative of an-- has been inserted before "isolated".

In claim 194, line 1, the phrase --derivative of an-- has been inserted before "isolated".

In claim 195, line 1, the recitation of "The" has been replaced by --A single-chain Class II-MHC-peptide-construct comprising the derivative of an--.

In claim 195, line 2, the recitation of "a" has been replaced by --an immunogenic peptide binding--.

In claim 196, line 1, the recitation of "isolated immunogenic peptide" has been replaced by --single-chain Class II-MHC-peptide construct--.

In claim 196, line 1, the phrase --immunogenic peptide binding-- has been inserted before the recitation of "portion".

Art Unit: 1644

In claim 197, line 1, the phrase --the derivative of -- has been inserted before "an".

In claim 198, line 1, the phrase -- an MHC Class II molecule or an immunogenic peptide binding portion thereof is linked to the derivative of -- has been inserted before "an".

In claim 198, line 2, the recitation of "195" has been replaced by --192--.

Claims 102 and 103 have been canceled without disclaimer, having been replaced by the following new claims:

--219. (New) A derivative of an isolated immunogenic peptide consisting of a portion of SEQ ID NO: 39 comprising at least 9 contiguous amino acids from amino acids 56-70 of SEQ ID NO: 39, wherein the immunogenic peptide is 9 to 34 amino acids in length and is recognized by a CD4<sup>+</sup> lymphocyte restricted by a major histocompatibility complex (MHC) class II molecule, wherein the derivative consists of a substitution of amino acid 65 of SEQ ID NO: 39 with a valine.

--220. (New) A derivative of an isolated immunogenic peptide consisting of a portion of SEQ ID NO: 39 comprising at least 9 contiguous amino acids from amino acids 448-462 of SEQ ID NO: 39, wherein the immunogenic peptide is 9 to 34 amino acids in length and is recognized by a CD4<sup>+</sup> lymphocyte restricted by a major histocompatibility complex (MHC) class II molecule, wherein the derivative consists of a substitution of amino acid 451 of SEQ ID NO: 39 with a phenylalanine.--

#### *Examiner's Comments*

3. No new matter has been introduced by this amendment. The recitation of "derivative" in claims 192-220 is supported in the specification or claims as originally filed at pages 8-9 for example. The recitation of "single-chain Class II-MHC-peptide construct" in claims 114, 115, 195 and 196 is supported on pages 27-28 for example.

#### *Conclusion*

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to F. Pierre VanderVegt whose telephone number is (571) 272-0852. The examiner can normally be reached on M-Th 6:30-4:00; Alternate Fridays 6:30-3:00.

Art Unit: 1644

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Chan can be reached on (571) 272-0841. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

F. Pierre VanderVegt, Ph.D. *PV*  
Patent Examiner  
June 9, 2004

*Christina Chan*  
CHRISTINA CHAN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1600